

THE UNIVERSITY OF ROCHESTER
COLLEGE OF ARTS AND SCIENCE
RIVER CAMPUS STATION
ROCHESTER 20, NEW YORK

BIOLOGICAL LABORATORIES

August 31, 1956

Professor Joshua Lederberg
Department of Genetics
University of Wisconsin
Madison, Wisconsin

Dear Josh:

Ken Cooper has been after me recently for not sending out reprints to those of my colleagues who may be interested in them. Of course, he is right, and I am sorry that I have not sent you any before this time.

I had hoped that Ephrussi's laboratory would send you my Experimental Cell Research paper (at least your name appears on the list of those to whom his office informed me it would forward my reprints), but in the event that you haven't received it, I am sending another copy along with a few others under separate cover.

I see that we are both scheduled to present papers at the forthcoming New York Academy of Sciences conference in November on "Subcellular Particles in the Neoplastic Process". With the view of not repeating anything that you may discuss, I have decided to write on the following theme. The mutation theory of the origin of neoplasms may be testable if it were possible to perform genetic transformations of cells of higher organisms in tissue culture. Is the DNA of cancer cells, for example, genetically differentiated so as to be capable of inducing the neoplastic process in normal cells? Any future investigations of genetic transformations in tissue culture may be aided by whatever knowledge we have already gained from studies of the transformation system in bacteria. I intend to discuss in my paper what little we know about genetic compatibility of host cells with the DNA transforming agent, of the conditions conducive to physiological "sensitization" or receptivity of the cells to the transforming agent, and of the conditions conducive to expression of the transforming agent after it has made effective contact with its host (i.e., is no longer reversible with DNase). I believe that any future investigator of the genetics of neoplasms may do well to know about these matters.

By the way, is it still possible to obtain a copy of your wonderful article "Cell Genetics and Hereditary Symbiosis"? I am quite willing, of course, to beg, steal or buy a copy.

With best regards,

Yours truly,



Arnold W. Ravin

AWR:jp